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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,479	05/24/2006	Yong-Geun Hong	CU-4833 WWP	4340
26530 7590 07/21/2009 LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604				
EXAMINER				
SARWAR, BABAR				
ART UNIT		PAPER NUMBER		
2617				
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07/21/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/580,479

**Applicant(s)**

HONG ET AL.

**Examiner**

BABAR SARWAR

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **06/26/2009** has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to **claims 1-9** have been considered but are moot in view of the new ground(s) of rejection.
3. **Claims 1, 3, 8** have been amended.
4. **Claims 1-9** are currently pending.
5. **Claim Rejections - 35 USC § 112** of the first paragraph have been withdrawn.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yegin et al. (US 7,286,671 B2) in view of Koodli et al. (US 6,930,988 B2) further in view of Takusagawa et al. (US 2003/0225892 A1), hereinafter referenced as Yegin,**

**Koodli and Taku.**

**Consider claim 1**, Yegin discloses a method for performing mobile IPv6 fast handover based on an access router (AR) **(Col. 1:58-63, Yegin discloses a client changing its point of attachment)**. Yegin discloses that a) when a mobile node (MN) completes a layer 2 handover **(Col. 6:45-50, Fig. 2 elements 135 and 145 where Yegin discloses the change of radio links from an access point of FR1 to an access point of FR2, therefore a layer 2 handover)**, a new access router (AR) receiving a modified Router Solicitation (RS) message from the mobile node (MN) **(Col. 6:59-61, Fig. 2, where Yegin discloses an RS being sent to a new access router by a client directly via an access point)** b) detecting layer 3 movement of the mobile node (MN) at the new access router (AR) based on the received modified RS message transmitted from the mobile (MN) node to the new access router (AR) **(Col. 6:63-64, where Yegin discloses that the access routers send their router advertisements (RA) in response to RS from clients)** e) transmitting a modified Router Advertisement (RA) message, which corresponds to the modified RS message transmitted from the mobile node (MN), to the mobile node (MN) from the new access router (AR) **(Col. 6:59-64, where Yegin discloses that the access router generates and returns router advertisements)**.

Yegin does not explicitly disclose performing Duplicate Address Detection (DAD) at the new access router (AR) to inspect uniqueness of the generated CoA. Koodli discloses **(Col. 7:11-19, where Koodli discloses an access router performing actions substantially similar to duplicate address detection (DAD), therefore**

**inspecting uniqueness of the generated (CoA) at the new access router).**

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Yegin with the teachings of Koodli so as to avoid the handover latencies as discussed in **Col. 1:11-48**.

Yegin and Koodli do not explicitly disclose that when the mobile node does layer 3 movement, the new access router (AR) generating a new Care of Address (CoA) for transmission to the mobile node (MN) and for use as the network interface address of the mobile node (MN). Taku discloses when the mobile node does layer 3 movement, the new access router (AR) generating a new Care of Address (CoA) for transmission to the mobile node (MN) and for use as the network interface address of the mobile node (MN) **(Para 0015-0019, Fig. 1, where Taku discloses a new access router generating and transmitting the a new care-of address to the mobile node).**

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Yegin and Koodli with the teachings of Taku so to expedite the hand over procedure as discussed in **Para 0009**.

Consider **claim 2**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Yegin specifically discloses that wherein the step a) includes the steps of: a1) receiving a re-association request message from the mobile node (MN) at an access point; and a2) transmitting a re-association reply message corresponding to the re-association request message to the mobile node (MN) from the access point **(Col. 6 lines 45-50, Fig. 2 elements 135 and 145 where Yegin discloses the change of radio links from an access point of FR1 to an access**

**point of FR2, therefore a layer 2 handover i.e. re-association process is performed with the new access point of the new access router).**

Consider **claim 3**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Taku specifically discloses that f) receiving the modified RA message transmitted from the access router (AR), using the CoA specified in the modified RA transmitted from the access router (AR) as a network interface address of the mobile node (MN) without DAD, and performing binding update at the mobile node (MN) (**Para 0015-0020, Fig. 1, where Taku discloses a new access router generating and transmitting the a new care-of address to the mobile node and the mobile node transmitting binding update message to the new access router**).

Consider **claim 4**, the combination teaches everything claimed as implemented above (see claim 1). In addition, Yegin specifically discloses wherein, in the step a), the access router (AR) receives the modified RS message from the mobile node (MN) as soon as the layer 2 handover is completed at the mobile node (MN) (**Col. 6:59-61, Fig. 2**).

Consider **claim 5**, the combination teaches everything claimed as implemented above (see claim 4). In addition, Yegin specifically discloses wherein, the step b), the movement of the mobile node (MN) in the layer 3 is detected at the access router (AR) by comparing a neighbor cache value of the access router (AR) and a layer 2 identifier of the mobile node (MN) included in the modified RS message, which is transmitted from the mobile node (MN) (**Col. 6:63-64, where Yegin discloses that the access**

**routers send their router advertisements (RA) in response to RS from clients).**

Consider **claim 6**, the combination teaches everything claimed as implemented above (see claim 5). In addition, Yegin specifically discloses wherein the modified RS message includes a flag which signifies the generation of the CoA (CoA Generate) (**Col. 6:43-67, Col. 7:1-13**).

Consider **claim 7**, the combination teaches everything claimed as implemented above (see claim 6). In addition, Yegin specifically discloses wherein the modified RA message includes a flag which signifies the generation of the CoA (CoA Generate) (**Col. 6:43-67, Col. 7:1-13**).

Consider **claim 8**, the combination teaches everything claimed as implemented above (see claim 7). In addition, Yegin specifically discloses wherein the modified RA message includes the CoA which is generated by the access router in the step c) (**Col. 6:43-67, Col. 7:1-13**).

Consider **claim 9**, the combination teaches everything claimed as implemented above (see claim 8). In addition, Yegin specifically discloses wherein the modified RA message includes a flag which signifies that the CoA is included in a prefix (**Col. 6:37-41**).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:00 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BS/

/BABAR SARWAR/  
Examiner, Art Unit 2617

/NICK CORSARO/

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